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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
09/944,064	08/31/2001	Gregory T. Gaudet	01048	8322	
75	90 03/28/2003				
Martha Ann Finnegan, Esq.			EXAMINER		
Cabot Corporation Billerica Technical Center			THERKORN, ERNEST G		
157 Concord Ro Billerica, MA	- · · · · · · · · · · · · · · · · · · ·		ART UNIT	PAPER NUMBER	
,			1723	9	
			DATE MAILED: 03/28/2003		

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	09/944,064 GAUD		DET					
omee Hellen Gummary	Examiner		Art Unit					
	THERKOR	U	1723					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address								
Period for Reply								
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE MONTH(S) FROM								
THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the								
If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.								
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed and a state of the date of this communication, even if timely filed and a state of the date of this communication.								
earned patent term adjustment. See 37 CFR 1.704(b). Status								
1) Responsive to communication(s) filed on Feb	DC 00103 0	. A M.	17 900					
2a). This action is FINAL . 2b) V This act	$\alpha 3, \alpha 0 0 \alpha$	NO 110	wen 1, 200	<u> </u>				
20/Ly This act	ion is non-final.							
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11; 453 O.G. 213.								
Disposition of Claims								
4) Claim(s) 1-46								
4a) Of the above, claim(s) 11 , $14-35$, 37 , 3	Q Uii . Aug	is/are	pending in the ap	oplication.				
5) 7 Claim(s)	0, 77, andes	is/are	withdrawn from	consideration.				
5) \Box Claim(s)	A (is	s/are allowed.					
of the claim(s) 1-10, 12-13, 36, 39-43, a	nd 4 p	is	s/are rejected.					
7)		is	s/are objected to.					
8) Claims are subject to restriction and/or election requirement.								
Application Papers								
9) \square The specification is objected to by the Examiner.								
10) ☐ The drawing(s) filed on is/are a) ☐ accepted or b) ☐ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner								
If approved, corrected drawings are required in reply to this Office action.								
12) The oath or declaration is objected to by the Examiner.								
Priority under 35 U.S.C. §§ 119 and 120								
13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).								
a) All b) Some* c) None of:								
1. Certified copies of the priority documents have been received.								
2. Certified copies of the priority documents have been received in Application No.								
3. Copies of the certified copies of the priority documents have been received in this National Stage								
application from the International Bureau (PCT Bule 17 2/2)								
*See the attached detailed Office action for a list of the certified copies not received. 14) Acknowledgement is made of a claim for demands are stated as a claim for demands are stated.								
and the system of a claim for definestic priority under 35 U.S.C. § 119(e).								
a) The translation of the foreign language provisional application has been received. 15) Acknowledgement is made of a claim for democracy and in the control of the foreign language provisional application has been received.								
Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s)								
1) Notice of References Cited (PTO-892)	. 🗀							
2) [] Note: 10.	Interview Summary (PTO							
Notice of Draftsperson's Patent Drawing Review (PTO-948) [3] Information Disclosure Statement(s) (PTO-1449) Paper No(s). 15.45.48 [5] Notice of Informal Patent Application (PTO-152) [6] Other:								

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-10, 12-13, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichikawa (U.S. Patent No. 5,270,280) in view of Mimori (U.S. Patent No. 5,476,989). At best, the claims differ from Ichikawa (U.S. Patent No. 5,270,280) in reciting use of an organic group and claims 12-13 further differ in reciting use of a temperature of less than 800° C. Mimori (U.S. Patent No. 5,476,989) (column 2, lines 15-24 and 53-56, column 4, lines 3-8, and column 4, line 60-column 5, line 20) discloses use of functional groups of a carbonized adsorbent allows selectivity. Mimori (U.S. Patent No. 5,476,989) (column 4, lines 4-10) discloses that carbonizing at 500° C allows carbon to become hydrophilic. It would have been obvious to use functional groups in Ichikawa (U.S. Patent No. 5,270,280) because Mimori (U.S. Patent No. 5,476,989) (column 2, lines 15-24 and 53-56, column 4, lines 3-8, and column 4, line 60-column 5, line 20) discloses use of functional groups of a carbonized adsorbent allows selectivity. It would have been obvious to carbonize at 500° C in Ichikawa (U.S. Patent No. 5,270,280) because Mimori (U.S. Patent No. 5,476,989) (column 4, lines 4-10) discloses that carbonizing at 500° C allows carbon to become hydrophilic.

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Claims 1-10 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichikawa (U.S. Patent No. 5,270,280) in view of either the Abstract of JP 02193066 or Holmes (WO 95/01838) and Mikes, Laboratory Handbook of Chromatographic and Allied Methods, pages 218-224 and 385-391. At best, the claims differ from Ichikawa (U.S. Patent No. 5,270,280) in reciting use of an organic group. Abstract of JP 02193066 discloses binding functional groups to carbon particles. Holmes (WO 95/01838) (page 1, lines 1-4 and the sentence bridging pages 1 and 2) discloses binding functional groups to carbon chromatography material enhances the selectivity of the adsorbent. Mikes, Laboratory Handbook of Chromatographic and Allied Methods, pages 218-224 and 385-391 discloses on page 385 that affinants/functional groups are added to selectively adsorb substances. It would have been obvious to use a functional group in Ichikawa (U.S. Patent No. 5,270,280) because Abstract of JP 02193066 discloses binding functional groups to carbon particles and because Mikes, Laboratory Handbook of Chromatographic and Allied Methods, pages 218-224 and 385-391 discloses on page 385 that affinants/functional groups are added to selectively adsorb substances. It would have been obvious to use a functional group in Ichikawa (U.S. Patent No. 5,270,280) because Holmes (WO 95/01838) (page 1, lines 1-4 and the sentence bridging pages 1 and 2) discloses binding functional groups to carbon chromatography material enhances the selectivity of the adsorbent and because Mikes, Laboratory Handbook of Chromatographic and Allied Methods, pages 218-224 and 385-391 discloses on page 385 that affinants/functional groups are added to selectively adsorb substances.

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Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichikawa (U.S. Patent No. 5,270,280) in view of either the Abstract of JP 02193066 or Holmes (WO 95/01838) and Mikes, Laboratory Handbook of Chromatographic and Allied Methods, pages 218-224 and 385-391 as applied to claims 1-10 and 36 above, and further in view of either Mimori (U.S. Patent No. 5,476,989) or Abstract of JP 54041296. At best, the claims differ from Ichikawa (U.S. Patent No. 5,270,280) in view of either the Abstract of JP 02193066 or Holmes (WO 95/01838) and Mikes, Laboratory Handbook of Chromatographic and Allied Methods, pages 218-224 and 385-391 in reciting use of a temperature of less than 800° C. Mimori (U.S. Patent No. 5,476,989) (column 4, lines 4-10) discloses that carbonizing at 500° C allows carbon to become hydrophilic. Abstract of JP 54041296 discloses that heating carbon black and a carbonisable binder at 500° C forms a support useful for adsorption. It would have been obvious to use a temperature of less than 800° C in Ichikawa (U.S. Patent No. 5,270,280) in view of either the Abstract of JP 02193066 or Holmes (WO 95/01838) and Mikes, Laboratory Handbook of Chromatographic and Allied Methods, pages 218-224 and 385-391 either because Mimori (U.S. Patent No. 5,476,989) (column 4, lines 4-10) discloses that carbonizing at 500° C allows carbon to become hydrophilic or because Abstract of JP 54041296 discloses that heating carbon black and a carbonisable binder at 500° C forms a support useful for adsorption.

Claims 39-43 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichikawa (U.S. Patent No. 5,270,280) in view of Mimori (U.S. Patent No. 5,476,989) as applied to claims 1-10, 12-13, and 36 above, and further in view of Dias (U.S. Patent No. 4,619,805). At

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best, the claims differ from Ichikawa (U.S. Patent No. 5,270,280) in view of Mimori (U.S. Patent No. 5,476,989) in reciting use of aqueous solvent. Dias (U.S. Patent No. 4,619,805) (column 2, lines 24-28) discloses use of water allows carbon particles to be coated with binders and is used with phenolic resin. It would have been obvious to use water in Ichikawa (U.S. Patent No. 5,270,280) in view of Mimori (U.S. Patent No. 5,476,989) because Dias (U.S. Patent No. 4,619,805) (column 2, lines 24-28) discloses use of water allows carbon particles to be coated with binders and is used with phenolic resin.

Claims 39-43 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichikawa (U.S. Patent No. 5,270,280) in view of the either the Abstract of JP 02193066 or Holmes (WO 95/01838), Mikes, Laboratory Handbook of Chromatographic and Allied Methods, pages 218-224 and 385-391, and either Mimori (U.S. Patent No. 5,476,989) or Abstract of JP 54041296 as applied to claims 12-13 above, and further in view of Dias (U.S. Patent No. 4,619,805). At best, the claims differ from Ichikawa (U.S. Patent No. 5,270,280) in view of the either the Abstract of JP 02193066 or Holmes (WO 95/01838), Mikes, Laboratory Handbook of Chromatographic and Allied Methods, pages 218-224 and 385-391, and either Mimori (U.S. Patent No. 5,476,989) or Abstract of JP 54041296 in reciting use of aqueous solvent. Dias (U.S. Patent No. 4,619,805) (column 2, lines 24-28) discloses use of water allows carbon particles to be coated with binders and is used with phenolic resin. It would have been obvious to use water in Ichikawa (U.S. Patent No. 5,270,280) in view of either the Abstract of JP 02193066 or Holmes (WO 95/01838), Mikes, Laboratory Handbook of Chromatographic and Allied Methods, pages

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218-224 and 385-391, and either Mimori (U.S. Patent No. 5,476,989) or Abstract of JP 54041296 because Dias (U.S. Patent No. 4,619,805) (column 2, lines 24-28) discloses use of water allows carbon particles to be coated with binders and is used with phenolic resin.

Claims 41 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over lchikawa (U.S. Patent No. 5,270,280) in view of Dias (U.S. Patent No. 4,619,805). At best, the claims differ from lchikawa (U.S. Patent No. 5,270,280) in reciting use of aqueous solvent. Dias (U.S. Patent No. 4,619,805) (column 2, lines 24-28) discloses use of water allows carbon particles to be coated with binders and is used with phenolic resin. It would have been obvious to use water in Ichikawa (U.S. Patent No. 5,270,280) because Dias (U.S. Patent No. 4,619,805) (column 2, lines 24-28) discloses use of water allows carbon particles to be coated with binders and is used with phenolic resin.

Claims 39, 40, 42, and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ichikawa (U.S. Patent No. 5,270,280) in view of Dias (U.S. Patent No. 4,619,805) as applied to claims 41 and 46 above, and further in view of either Mimori (U.S. Patent No. 5,476,989) or Abstract of JP 54041296. At best, the claims differ from Ichikawa (U.S. Patent No. 5,270,280) in view of Dias (U.S. Patent No. 4,619,805) in reciting use of a temperature of less than 800° C. Mimori (U.S. Patent No. 5,476,989) (column 4, lines 4-10) discloses that carbonizing at 500° C allows carbon to become hydrophilic. Abstract of JP 54041296 discloses that heating carbon black and a carbonisable binder at 500° C forms a support useful for adsorption. It would have been obvious to use a temperature of less than 800° C in Ichikawa (U.S. Patent No. 5,270,280) in

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view of Dias (U.S. Patent No. 4,619,805) because Mimori (U.S. Patent No. 5,476,989) (column 4, lines 4-10) discloses that carbonizing at 500° C allows carbon to become hydrophilic or because Abstract of JP 54041296 discloses that heating carbon black and a carbonisable binder at 500° C forms a support useful for adsorption.

The remarks urge that the inventions of Groups II and III should be examined with the invention of Group I because there is no serious burden on the examiner. However, Group II would require additional searching Class 210, subclasses 635 and 656 as well as other chromatographic method subclasses and Group III would require searching Class 502, subclass 439 as well as other method of making granule subclasses. The additional search as well as the different issues of patentability would be an enormous burden on the examiner. Accordingly, the restriction requirement and elections of species been reconsidered, deemed proper, and made final for the reasons of record.

Claims 11 and 44-45 have been withdrawn as being drawn to non-elected species.

Any inquiry concerning this communication should be directed to E. Therkorn at telephone number (703) 308-0362.

Ernest G. Therkorn Primary Examiner Art Unit 1723

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EGT/12 March 20, 2003